

REMARKS

Favorable reconsideration of the application is respectfully requested in light of the amendments and remarks herein.

Upon entry of this amendment, claims 1-24 will be pending. By this amendment claims 1, 11, and 21-23 have been amended; and claim 24 has been added. No new matter has been added.

§102 Rejection of Claims 1-23

In Section 1 of the Office Action, the Examiner has rejected claims 1-23 under 35 U.S.C. §102(b) as being anticipated by Kondo *et al.* (U.S. Patent No. 5,852,470; hereinafter referred to as "Kondo"). Claims 1, 11, and 21-23 have been amended to address the rejection.

In the Background section of the Specification, it was disclosed that "[i]f there is a missing pixel which cannot be restored by the error correcting code, correlation between the missing pixel and its surrounding pixels is analyzed and pixels disposed in a direction in which strong correlation is found are used for linear interpolation. ... When the missing pixel is replaced with another pixel or linear interpolation is used for the missing pixel, however, since resolution decreases and continuity with surrounding pixels is lost, a reproduced image gives a different impression." *Background of the Specification, page 2, line 22 to page 3, line 13.*

To solve this problem, embodiments of the present invention provide a capability to generate a higher-quality pixel irrespective of whether a pixel is missing. For example, the structure of apparatus claim 1, as presented herein, includes:

"a class classifier for classifying an aimed-at data item into one of a plurality of classes specified in advance, according to a plurality of data items disposed around the

aimed-at data item;
a memory for storing conversion information for the aimed-at data item for each class; and
a converter for converting the aimed-at data item to a data item having a higher quality,
according to the conversion information,
wherein the class classifier classifies the aimed-at data item into a different class
according to *at least one of a missing condition of the aimed-at data item and one or
more data items disposed around the aimed-at data item.*” (emphasis added)

Therefore, the information processing apparatus of claim 1 includes a class classifier that
classifies the aimed-at data item into a different class according to a missing condition of the
aimed-at data item and/or one or more data items disposed around the aimed-at data item.

Claim 2 describes a particular embodiment in which the converter generates data items
having a higher quality (*e.g.*, missing pixel creation in 308 as shown in Figure 28), which can be
used, for example, in a quadruple-density-resolution creation circuit 312 in Figure 28.

Although Kondo discusses a classification process, the focus of Kondo’s “classification
adaptive processing” is different from that of claim 1. Kondo generates a high definition (HD)
signal (*i.e.*, a second video signal) from a standard definition (SD) signal (*i.e.*, a first video
signal) based on learning achieved between the two signals. That is, Kondo generates class code
using one of a plurality of pixel patterns based on a spatial activity of the first video signal, and
produces a second video signal using prediction coefficients corresponding to the class code.
Thus, Kondo fails to teach or suggest using a missing condition of a first video signal in order to
produce a second video signal.

Based on the foregoing discussion, it is maintained claim 1 should be allowable over
Kondo. Furthermore, since independent claims 11 and 21-23 closely parallel, and include

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substantially similar limitations as, independent claim 1, claims 11 and 21-23 should also be allowable over Kondo. Since claims 2-10 and 12-20 depend from claims 1 and 11, respectively, claims 2-10 and 12-20 should also be allowable over Kondo.

Accordingly, it is submitted that the Examiner's rejection of claims 1-23 based upon 35 U.S.C. §102(b) has been overcome by the present remarks and withdrawal thereof is respectfully requested.

Newly-added Claim 24

Based on the foregoing discussion regarding claim 1, and since claim 24 depends from claim 1, newly-added claim 24 should also be allowable over Kondo.

Conclusion

In view of the foregoing, entry of this amendment, and the allowance of this application with claims 1-24 are respectfully solicited.

In regard to the claims amended herein and throughout the prosecution of this application, it is submitted that these claims, as originally presented, are patentably distinct over the prior art of record, and that these claims were in full compliance with the requirements of 35 U.S.C. §112. Changes that have been made to these claims were not made for the purpose of patentability within the meaning of 35 U.S.C. §§101, 102, 103 or 112. Rather, these changes were made simply for clarification and to round out the scope of protection to which Applicant is entitled.

In the event that additional cooperation in this case may be helpful to complete its prosecution, the Examiner is cordially invited to contact Applicant's representative at the telephone number written below.

The Commissioner is hereby authorized to charge any insufficient fees or credit any overpayment associated with the above-identified application to Deposit Account 50-0320.

Respectfully submitted,

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